

# BOGEN<sup>®</sup>

COMMUNICATIONS, INC.

## AUTO-REVERSE CASSETTE TAPE PLAYER AND FM-STEREO/FM/AM TUNER

CPT-1B

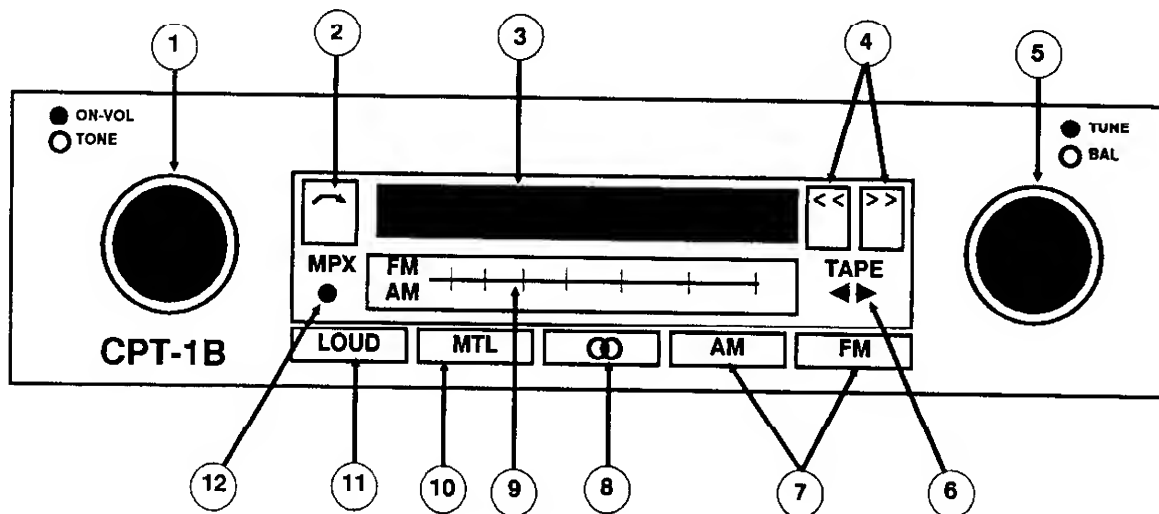
### OPERATING INSTRUCTIONS

#### DESCRIPTION

The Bogen Model CPT-1B is a compact, integrated unit consisting of a stereo/mono cassette tape player and an FM-stereo/FM/AM tuner. It provides a reliable, economical source of background music for a sound system. Program continuity is assured by the automatic tape reverse feature, which changes the direction when the tape reaches the limit of its travel.

The CPT-1B operates on 120 volts AC. It incorporates a low-level, low-impedance output, which will drive the auxiliary input of a public address amplifier. The unit can also drive 8-ohm loudspeakers directly with its internal stereo amplifier (five watts per channel).

If desired, the CPT-1B may be mounted in a standard 19-inch equipment rack by means of the optional RPK-55B Rack Panel Kit.



#### CONTROLS AND FUNCTIONS

1. ON-VOL & TONE — clockwise rotation of TONE increases treble response; counterclockwise rotation increases bass response.
2. EJECT — press IN to eject cassette.
3. AUTO REVERSE CASSETTE — insert cassette until it engages; unit automatically goes from radio to tape playing mode.
4. FAST FORWARD & REWIND SELECTORS
5. TUNE & BAL — rotate TUNE control in either direction to select desired frequency. Rotate BAL clockwise to increase sound to the right channel; counterclockwise to increase sound to the left channel.
6. TAPE DIRECTION INDICATORS — show direction of the tape.
7. AM/FM SELECTORS
8. STEREO/MONO SWITCH — for normal FM-stereo reception set this switch to the IN position. Set the switch in the OUT position for monaural operation, when receiving weak signals

that cause the MPX indicator to come on and off, or to eliminate the annoying background noise from weak FM-stereo stations while tuning.

9. FREQUENCY SCALE — scale indicates radio frequency being received.
10. MTL — press IN when using metal-type tape, OUT for normal tape.
11. LOUD — press IN to increase low end response.
12. MPX — illuminates when a stereo signal is received.

#### TO PLAY A CASSETTE TAPE

The door of the CPT-1B is hinged and will open and close with the insertion and removal of the cassette.

1. Rotate the power ON-VOL switch clockwise and increase volume slightly.
2. Check the cassette to be certain that the tape is tightly wound on the reels.

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3. Insert the narrow end of the cassette into tape door, with exposed tape toward the right. When the cassette is fully inserted it will automatically begin to play (the unit will switch from radio to the tape player mode).
4. When the tape reaches the limit of its travel, the CPT-1B will automatically reverse direction and play the opposite side of the cassette.
  - a. To advance tape rapidly, press the fast-forward selector ( $>>$ ).
  - b. To rewind tape rapidly, press the reverse selector ( $<<$ ).
5. To remove the cassette, press the eject button.

#### IMPORTANT NOTE

*Always remove the cassette from the CPT-1B after use to prevent damage to the cassette and tape drive mechanism.*

### FM/AM OPERATION

1. Rotate the power ON-VOL switch clockwise and increase volume slightly.
2. Select either FM or AM radio band by pressing the appropriate AM or FM selector button.
3. Select desired position of the Stereo/Mono mode switch.
4. Rotate tuning knob to locate the desired radio frequency as indicated on the frequency scale.

### IMPORTANT ROUTINE MAINTENANCE

To avoid the need for frequent servicing, we strongly recommend periodic cleaning of the tape head, capstans, and pinch rollers. This will also ensure high quality reproduction of programmed material. The unit should be cleaned after every 20 to 30 hours of operation. A high-quality cassette cleaning cartridge is recommended; however, if one is not readily available, proceed as follows:

1. Saturate a cotton swab with isopropyl alcohol.
2. While holding the cassette door open, locate the tape head (to the right of the opening and toward the center of the unit).
3. Clean the tape head, capstans, and pinch rollers with the cotton swab.
4. Allow parts to dry before operating the unit.

### OVERLOAD PROTECTION

The CPT-1B is protected by an internal 100mA, slow blow fuse. If this fuse opens, the unit will shut down completely; have the trouble investigated by a qualified technician.

#### CAUTION

*There are no user-serviceable parts within the unit. To avoid an electric shock hazard, have all internal servicing performed by qualified service personnel only. The warranty will become void if repairs are made by other than the Bogen Service Department or authorized service agency.*

### IMPORTANT ANTENNA INFORMATION

Articles 810 and 820 of the National Electric Code, ANSI/NFPA No. 70-1978 provides information regarding antenna grounding. The CPT-1B is designed for connection to various antenna systems as illustrated in Figures 1 through 3.

#### CAUTION

*Use No. 8 AWG aluminum wire, or larger, as ground wires for both mast and lead-in and secure to building structure with insulators spaced 4 to 6 feet apart. Mount antenna discharge unit as closely as possible to where the lead-in enters the building structure.*

**FM LINE ANTENNA.** The CPT-1B line cord may be used as an internal FM Line Antenna for receiving FM broadcasts (See Figure 1). For improved reception, particularly in weak signal areas or for tuners mounted in consoles or racks, installation of an outdoor FM or "T" antenna is necessary.

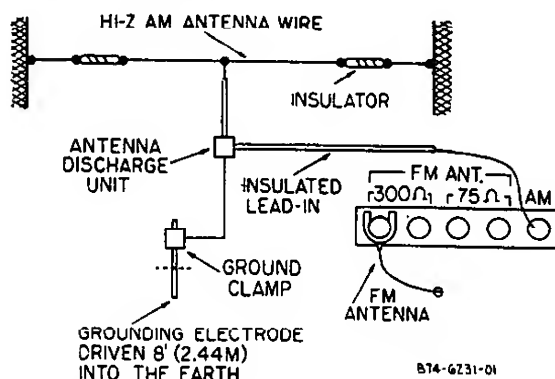


Figure 1 - Connecting Outdoor AM and FM Line Antenna.

**EXTERNAL FM ANTENNA.** If installing a standard 300-ohm antenna system, connect the twin-lead transmission line as shown in Figure 2. If conditions require use of a coaxial transmission line, such as RG-11 or RG-59, connect as shown in Figure 3. Always disconnect the FM line antenna when using external FM antenna.

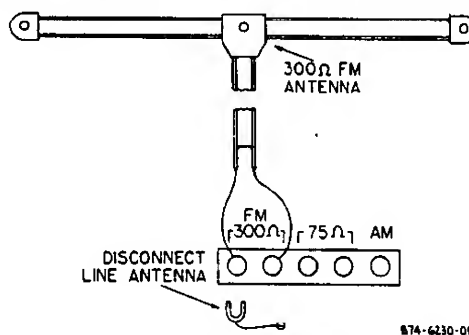


Figure 2 - Connecting Indoor FM Antenna, 300 Ohm System

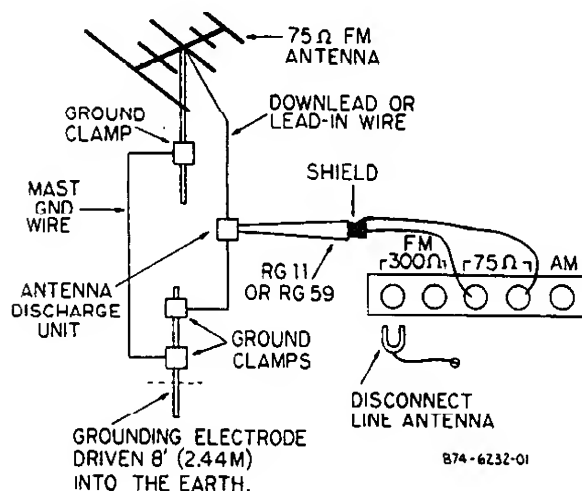


Figure 3 - Connecting Outdoor FM Antenna, 75 Ohm System